Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 34003.83

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on December 20, 2006

Signature: Susan Jones

Typed or printed name: Susan Jones

Application Number	Filed
10/698,178	October 31, 2003

First Named Inventor: Tushar Udeshi

Art Unit	Examiner
2168	Oni, Olubusola

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 55,272
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

Signature: DRHofman

Dave R. Hofman
Typed or printed name

(713) 547-2523
Telephone number

December 20, 2006
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- [x] *Total of 1 forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Udeshi, et al.	§	Attorney Docket No. 34003.83
Serial No.: 10/698,178	§	Customer No. 27683
Filed: October 31, 2003	§	Group Art Unit: 2168
For: System and Method for Processing a Hierarchical Data Tree	§	Examiner: Ola, Olubusola

REASONS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicants submit that there is clear error with respect to the Examiner's rejection of claims 1-55 for at least the following reasons.

§102(b) Rejection of Independent Claims

Independent claims 1, 27, 39 and 54, among others, were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. Pub. No. 2001/0044327 of Kanefsky ("Kanefsky"). However, as explained below, Kanefsky does not disclose most of the elements of claims 1, 27, 39 and 54.

Method for performing an operation on a hierarchical data tree

Kanefsky clearly does not disclose performing an operation on a hierarchical data tree. Kanefsky discloses visiting different portions of a data tree to display a series of nested messages to a user as the user navigates among a series of nested folders each associated with the messages. This is not the same as performing an operation on the data tree.

For example, the data in Kanefsky's tree, such as the messages, folders, and folder contents, do not change. In the present application, the operation performed on the hierarchical data tree results in a change in the data of the data tree. However, no such change in the data is disclosed in Kanefsky. In contrast, the data in Kanefsky's tree is static – it does not change, whether in response to the performance of an operation thereon or otherwise. The data in Kanefsky's tree is predetermined and pre-programmed; the user merely navigates through the data based upon selecting an icon in a folder, where such selection merely leads to another folder in the nested folder series.

An operation can be defined as an expression that derives a new value from one or more other values. An operator, such as the addition operator (+) or concatenation operator (&), determines how the new value is derived. An operation can also be defined as any mathematical process, such as addition, subtraction, multiplication, division, raising to a power, etc. An operation can also be defined as a specification of a transformation of data. An operation is often a function performed on one or more values to produce one or more new values. The performance of an operation inherently implies a change in the object upon which the operation is performed. Examples of operations in the present application supporting these definitions include those found in Paragraph [0031], Paragraph [0034] and Paragraph [0035]. Kanefsky fails to disclose anything resembling any of the above examples of operations disclosed in the present application. Kanefsky also fails to disclose anything falling within the possible definitions of an "operation" in the context of the present application.

Moreover, the Examiner has failed to specifically indicate how Kanefsky discloses an operation that is performed on a hierarchical data tree. That is, the Examiner points to Kanefsky paragraphs [0067]-[0074] as

allegedly disclosing the performance of an operation on a hierarchical data tree. However, these paragraphs in Kanefsky merely disclose performing an action in response to the user's navigation of the data tree. They do not disclose performing an operation on the data tree. For example, Kanefsky teaches in Fig. 6 and paragraphs [0073]-[0074] that a script 628 can perform a first "operation" designed to attract a consumer's attention, and if the consumer responds to the script 628, the script 628 can evoke a second "operation" to provide the consumer with tire options and prices from which to choose, search the databases of vendors via the Internet to assure that a vendor has the consumer's tire choice in stock, reserve/purchase the tires using the consumer's credit card information, arrange for a towing, and place a phone call to the tire vendor. These operations ("a first operation" and "a second operation") are merely *actions* performed in response to the consumer navigating the data tree, and are not *operations* in the context of the present application. Moreover, none of these "operations" taught in Kanefsky are performed on the data tree, and none change the data in Kanefsky's data tree. Thus, although Kanefsky uses the word "operation" to describe an *action* taken in response to user navigation of the data tree, it is not the same as the operation recited in the claims of the present application – it is not an operation performed on the data tree.

Put another way, Kanefsky teaches querying the data tree in response to the consumer's navigation of the data tree, then displaying the results of the query and subsequently performing an action based on or using the query results. However, the data resulting from the query is not subsequently changed. If the consumer repeats the same series of selections from the nested folders at a later point in time (e.g., the following day, week, or month), the same action will result from such navigation because the data in Kanefsky's tree does not change as a result of the user input. In contrast, the present application is directed towards performing an operation on the data tree by querying the data tree, changing the data resulting from the query by performing the operation, then replacing the data resulting from the query with the data resulting from the operation. Clearly, these represent two patentably distinct concepts. One concept (Kanefsky) involves using the data from a data tree to perform an action or service, while the other concept (the present application) involves changing the data of a data tree by performing an operation on the data.

Querying a pre-/post-operation data pair cache for a key representing the anchor node and the plurality of neighboring nodes in a pre-operation condition

Kanefsky does not disclose a cache containing data pairs, where each data pair includes pre-operation data and post-operation data, and where each data pair corresponds to an anchor node and a plurality of neighboring nodes. Thus, necessarily, Kanefsky also fails to disclose querying such a cache for a key representing an anchor node and a plurality of neighboring nodes in a pre-operation condition.

In contrast, Kanefsky merely discloses a series of nested folders, including a first level "root" folder and lower level "deck" folders, where the root and deck folders each contain a number of items which may include links to email messages, web pages, etc. This series of nested folders and the items contained therein are clearly not the same as, or even analogous to, the above-described pre-/post-operation data pair cache. For example, the series of nested folders and items therein do not include pairs of data representing both a pre-operation condition and post-operation condition. One reason for this is that Kanefsky fails to disclose performing an operation on the series of nested folders and items contained therein, as described in the previous section above. Moreover, because the folders are not the same as the pre-/post-operation data pair cache of the present application, Kanefsky also fails to disclose searching the folders and items therein for a key representing an anchor one of the folders/items and a plurality of neighboring folders/items in a pre-operation condition. That is, Kanefsky fails to disclose that the folders/items have a pre-operation condition (or a post-operation condition). Accordingly, it is impossible that Kanefsky can disclose searching the folders/items for a key representing a pre-operation folder and its neighboring folders.

Moreover, the Examiner has failed to specifically indicate how Kanefsky discloses a cache containing pre-/post-operation data pairs. In contrast, the Examiner has merely pointed to sections of Kanefsky which fail to mention a data cache of any kind.

Replacing pre-operation data with cached post-operation data or generated post-operation data depending on whether the query finds a match

As described above, Kanefsky fails to disclose performing an operation on data in a hierarchical data tree. As also described above, Kanefsky also fails to disclose a cache containing data pairs, where each pair includes pre-operation data and post-operation data, and where each pair corresponds to an anchor node and a plurality of neighboring nodes. Additionally, as described above, Kanefsky must also necessarily fail to disclose querying such a cache for a key representing an anchor node and a plurality of neighboring nodes in a pre-operation condition. In view of all of this, it is undeniable that Kanefsky also fails to disclose replacing pre-operation data with cached post-operation data or generated post-operation data depending on whether the query finds a match.

For example, Kanefsky fails to teach changing pre-operation data to post-operation data by performing an operation on the data, thereby generating post-operation data. Consequently, since Kanefsky fails to disclose generating post-operation data, Kanefsky must also fail to disclose replacing pre-operation data with generated post-operation data. Moreover, the Examiner has failed to indicate with any specificity how Kanefsky teaches replacing pre-operation data with generated post-operation data.

As also described above, Kanefsky fails to disclose querying a cache containing data pairs, where each pair includes pre-operation data and post-operation data representing before/after configurations of an anchor node and its neighboring nodes. Consequently, since Kanefsky fails to disclose such cache querying, Kanefsky necessarily also fails to disclose replacing pre-operation data with data retrieved from such a cache. Moreover, the Examiner has failed to indicate with any specificity how Kanefsky teaches replacing pre-operation data with data retrieved from a cache.

In addition, Kanefsky necessarily fails to disclose replacing pre-operation data with cached post-operation data or generated post-operation data based on whether a data pair cache query finds a match since Kanefsky fails to disclose: (1) generating post-operation data by performing an operation on pre-operation data; (2) the existence of a cache containing pre-/post-operation data pairs; and (3) querying such a cache. Each of these three elements, among others, is required to replace pre-operation data with cached post-operation data or generated post-operation data based on whether the cache query finds a match. Since Kanefsky fails to disclose any such elements, Kanefsky necessarily fails to disclose the claimed replacement of pre-operation data with post-operation data. Moreover, the Examiner has failed to specifically indicate how Kanefsky discloses replacing pre-operation data with cached post-operation data or generated post-operation data based on whether a data pair cache query finds a match.

In view of any one or more of the reasons described above, the Examiner's §102 rejections are not supported by Kanefsky. Therefore, Applicants respectfully request the Examiner withdraw the §102 rejections.

§103 Rejection of Dependent Claims: Kanefsky in view of Hsiung and/or Schreiber

Several claims were rejected under §103 as being unpatentable over Kanefsky in view of U.S. Pat. No. 6,865,509 to Hsiung ("Hsiung"), or as being unpatentable over Kanefsky in view of U.S. Pat. Pub. No. 2002/0138353 of Schreiber ("Schreiber"), or as being unpatentable over Kanefsky in view of Schreiber and Hsiung. Applicants traverse these rejections on the grounds that these references are defective in establishing a *prima facie* case of obviousness for at least the following reasons.

Even when combined, the references do not teach the claimed subject matter

As described above, Kanefsky fails to teach each and every element of claims 1, 27 and 39. Moreover, Hsiung and Schreiber each independently fail to cure Kanefsky's shortcomings because Hsiung and Schreiber each possess the same deficiencies as Kanefsky with respect to failing to disclose each and every element of claims 1, 27 and 39. For example, Hsiung and Schreiber each fail to disclose performing an operation on a hierarchical data tree; the existence of a cache containing data pairs, where each pair includes pre-operation

data and post-operation data, and where each pair corresponds to an anchor node and a plurality of neighboring nodes; querying such a cache for a key representing an anchor node and a plurality of neighboring nodes in a pre-operation condition; and replacing pre-operation data with cached post-operation data or generated post-operation data depending on whether the query finds a match.

Nonanalogous art cannot be used to establish obviousness

The present application is directed towards solid model data manipulation, such as systems and methods for processing data stored in a directed acyclic graph octree. In contrast, Kanefsky is limited to methods and systems for allowing a wireless device user to navigate a menu whereby, in response to various navigation commands, a wireless server can retrieve extrinsic information based on the user's navigation. Such methods and systems are outside the field of solid model data manipulation. 35 USC §103 requires that obviousness be determined on the basis of whether, at the time the invention was made, a person of ordinary skill in the art would have found the claimed invention, as a whole, obvious. Although one of ordinary skill in the art is presumed to be aware of all prior art in the field to which the invention pertains, he is not presumed to be aware of prior art outside that field and the field of the problem to be solved, i.e., nonanalogous art.

Accordingly, in assessing the propriety of any assertion of prior art as a basis for a *prima facie* case of obviousness, one must determine the scope or bounds of the knowledge of one of ordinary skill in the art, i.e., the analogous art presumably known by one of ordinary skill in the art. Here, Kanefsky is from a nonanalogous art, thus precluding any *prima facie* case of obviousness.

Moreover, the Patent Office classification of references are evidence of nonanalogy. (See MPEP § 2141.01(a)). However, the present application is in class 707 (data processing: database and file management or data structures), Kanefsky is in class 455 (telecommunications), Hsiung is in class 702 (data processing; measuring, calibrating or testing), and Schreiber is in class 705 (data processing: financial, business practice, management, or cost/price determination).

Because Kanefsky is in class 455, it is nonanalogous art with respect to the present application, which is in class 707, such that it is improper to use Kanefsky as a basis for a §103 rejection. Moreover, because Kanefsky is in class 455, it is also nonanalogous art with respect to Hsiung, which is in class 702, such that it is improper to combine Kanefsky and Hsiung as a basis for a §103 rejection. Moreover, because Kanefsky is in class 455, it is also nonanalogous art with respect to Schreiber, which is in class 705, such that it is improper to combine Kanefsky and Schreiber as a basis for a §103 rejection.

The combination of references is improper

Assuming, arguendo, that none of the above arguments for non-obviousness apply (which is clearly not the case based on the above), another mutually exclusive and compelling reason why Kanefsky, Hsiung and/or Schreiber cannot be applied to claims 1, 27 and 39, and their dependent claims, is that neither Kanefsky, Hsiung nor Schreiber teaches, or even suggests, the desirability of combination as specified above and as claimed in claims 1, 27 and 39. That is, none of the references teach or suggest:

- performing an operation on a hierarchical data tree;
- querying a pre-operation/post-operation data pair cache for a key representing an anchor node and a plurality of neighboring nodes in a pre-operation condition;
- replacing retrieved pre-operation data with cached post-operation data;
- performing an operation on retrieved pre-operation data to generate post-operation data;
- replacing retrieved pre-operation retrieved data with generated post-operation data; or
- storing generated post-operation data in a cache with associated retrieved pre-operation data.

In view of any one or more of the reasons described above, the Examiner's §103 rejections are not supported

by Kanefsky. Therefore, Applicants respectfully request the Examiner withdraw the §103 rejections.

Examiner's Response to Applicants' Response to Non-Final Office Action

The Examiner responded to Applicants' previous explanation of Kanefsky being nonanalogous art by explaining that it has been held that a prior art reference must either be in the field of applicant's endeavors or, if not, then be reasonably pertinent to the particular problem with which the application was concerned, in order to be relied upon as a basis for rejection of the claimed invention. However, neither of these conditions are satisfied in the present scenario.

For example, Kanefsky is not in the field of Applicants' endeavors. Kanefsky is in the field of telecommunications. In direct contrast, Applicants' endeavors are directed towards solid model data manipulation, such as systems and methods for processing data stored in, for example, a directed acyclic graph octree. Clearly, Kanefsky's telecommunications teachings are not in the field of solid model manipulation or other forms of data processing, database and file management, or data structures. Thus, for this reason alone, Kanefsky is nonanalogous art.

Moreover, Kanefsky is not reasonably pertinent to the particular problem with which the present application is concerned. The field of Kanefsky's teachings (telecommunications) are not reasonably pertinent to solid model data manipulation, systems and methods for processing data stored in a directed acyclic graph octree, performing equivalence class merging with a particularly large and/or complex engineered or solid model, or the desire to perform such data manipulation on common desktop computers. These examples of the particular problems addressed by the present application are provided in the Background section of the application. However, none of these example problems are reasonably pertinent to Kanefsky's teachings regarding telecommunications. Thus, for this reason alone, Kanefsky is nonanalogous art.

Consequently, Kanefsky cannot be relied upon as a basis for rejection of the claims of the present application, because Kanefsky is nonanalogous art with respect to the present application and with respect to Schreiber and Hsiung.

Conclusion

It is respectfully submitted that all the claims in the application are in condition for allowance.

Respectfully submitted,

Dave R. Hofman
Registration No. 55,272

Dated: December 20, 2006
HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: (713) 547-2523
Facsimile: (214) 200-0853
File: 34003.83
H-649302.1

EXPRESS MAIL NO.: EV 703490024US

DATE OF DEPOSIT: December 20, 2006

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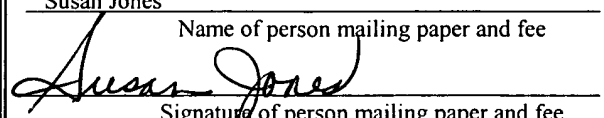

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